

What is claimed is:

1. A vaso-occlusive device for treating a vascular malformation, comprising:

an implantable body defining a volume and dimensions suited for implantation at a targeted

5 site in the patient's vasculature; and

an electrical charge source carried by the said body capable of exposing a selected charge to
endovascular media after implantation.

2. The device of Claim 1 wherein the electrical charge source comprises a volume of electroactive

10 particles carried by portions of said implantable body.

3. The device of Claim 4 wherein said volume of electroactive particles is carried in at least one

substantially thin layer around said implantable body.

4. The device of Claim 4 wherein said volume of electroactive particles is carried in an interior layer

15 of said implantable body.

5. The device of Claim 4 further comprising an exposed conductive element coupled to said volume of

electroactive particles.

6. The device of Claim 1 wherein the implantable body comprises at least one elongate wire-like

20 member for deformable placement is an aneurysm sac.

7. The device of Claim 1 wherein the implantable body comprises a plurality of wire-like members forming a three-dimensional structure for placement in an aneurysmal sac.

8. The device of Claim 1 wherein the implantable body is of shape memory material having a first linear or collapsed shape for disposition in the guide wire lumen of a catheter and a second expanded shape for disposition in an aneurysm and said implantable body has first and second end portions that are detachably coupled to first and second guide members.

9. A vaso-occlusive method, comprising the steps of:

implanting an implant body in a targeted site in a patient's vasculature, wherein the implant body carries a self-contained electrical charge source; and

exposing body media within the targeted site to a selected electrical charge thereby enhancing the formation of thrombus in the targeted site.

10. The vaso-occlusive method of Claim 9 wherein the electrical charge is positive.

11. The vaso-occlusive method of Claim 9 wherein the electrical charge is negative.

12. The vaso-occlusive method of Claim 9 wherein the electrical charge is both positive and negative

thereby causing current flow in the endovascular media.

13. A vaso-occlusive device for treating a vascular malformation, comprising:

an implant body defining a length and cross-section suitable for placement in a vascular malformation; and

a voltage source carried within the implantable member.

5

14. The vaso-occlusive device of Claim 13 wherein the voltage source comprises an anode and a

cathode of electroactive compositions and a separator element disposed therebetween.

15. The vaso-occlusive device of Claim 14 wherein said electroactive compositions comprise

nanoparticles.

16. The vaso-occlusive device of Claim 15 wherein said nanoparticles have an average cross-section

ranging from about 1 nm to 250 nm.

17. The vaso-occlusive device of Claim 13 further comprising a first conductive material coupled to

said anode composition and exposed to an exterior of the body.

18. The vaso-occlusive device of Claim 13 further comprising a second conductive material coupled to

said cathode composition and exposed to an exterior of the body.

19. The vaso-occlusive device of Claim 13 wherein the voltage source provides from about 0.01 to 5

volts.

20

20. The vaso-occlusive device of Claim 13 further comprising;

a detachable coupling wherein said vaso-occlusive device has a first end surface and a guide member has a second end surface, the first and second surfaces adhered together by a bond matrix;

wherein the guide member comprises an optic fiber; and

5 wherein the bond matrix carries a volume of chromophore particles that thermoelastically expand upon photoabsorption of a selected wavelength delivered through the optic fiber to propagate a bi-polar stress wave within the bond matrix.

1003183-0000